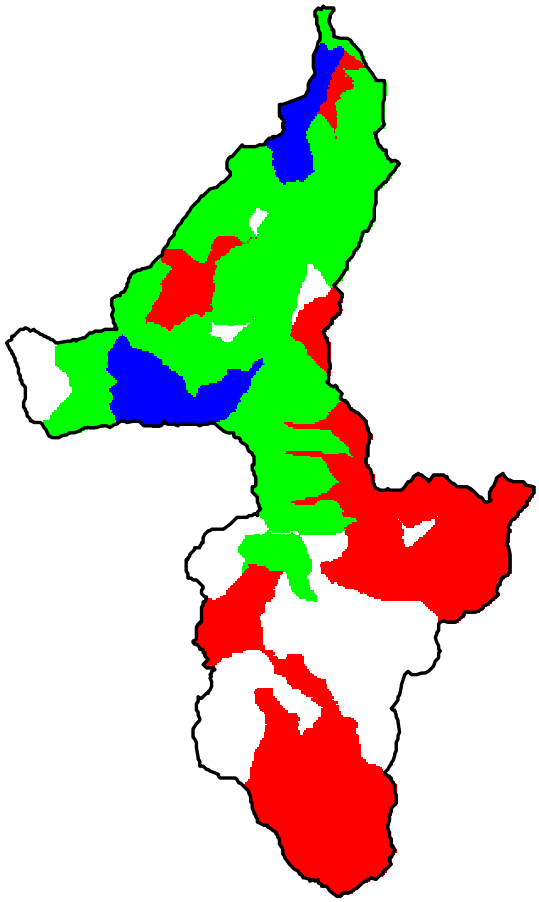

Figure 5-13. The delineation of TOPAGNPS regions for use with various CSA and MSCL values within TOPAGNPS to develop a more detailed subdivision of the Upper Truckee River watershed for use as AnnAGNPS cells. Region 1 is indicated with white, Region 2 with red, and Region 3 with green, and Region 4 is blue.

Table 5-2. The TOPAGNPS critical source area (CSA) and minimum source channel length (MSCL) parameters used for each of the four regions defined for the final subdivision of the Upper Truckee River watershed into AnnAGNPS cells.

TOPAGNPS CSA and MSCL Region	CSA Parameter (hectares)	MSCL Parameter (meters)
1	200	500
2	100	250
3	50	100
4	25	50

Figure 5-14. The final generation of AnnAGNPS cells used for the Upper Truckee River watershed simulations.

Ward Creek Watershed

Drainage Boundary. A determination of the drainage boundary for Ward Creek watershed follows similar procedures as used for General Creek watershed (Figure 5-15). For Ward Creek watershed the outlet coincides with the mouth of Ward Creek as it flows into Lake Tahoe.

Subdrainage Areas: AnnAGNPS Cells. The determination of the subdrainage areas of the Ward Creek watershed into AnnAGNPS cells was performed based on the spatial variation of landuse and the location of the digitized stream network. The initial subdivision produced 33 AnnAGNPS cells distributed throughout the watershed (Figure 5-16). Various AnnAGNPS cells were selected for further subdivision using one of three various TOPAGNPS regions defined within the generation of the network region generation file (Figure 5-17). The final subdivision of the Ward Creek watershed with TOPAGNPS produced 139 AnnAGNPS cells based on three TOPAGNPS regions using CSA and MSCL values provided in Table 5-3, with an associated stream network of 58 reaches to produce the final subwatershed layer (Figure 5-18).

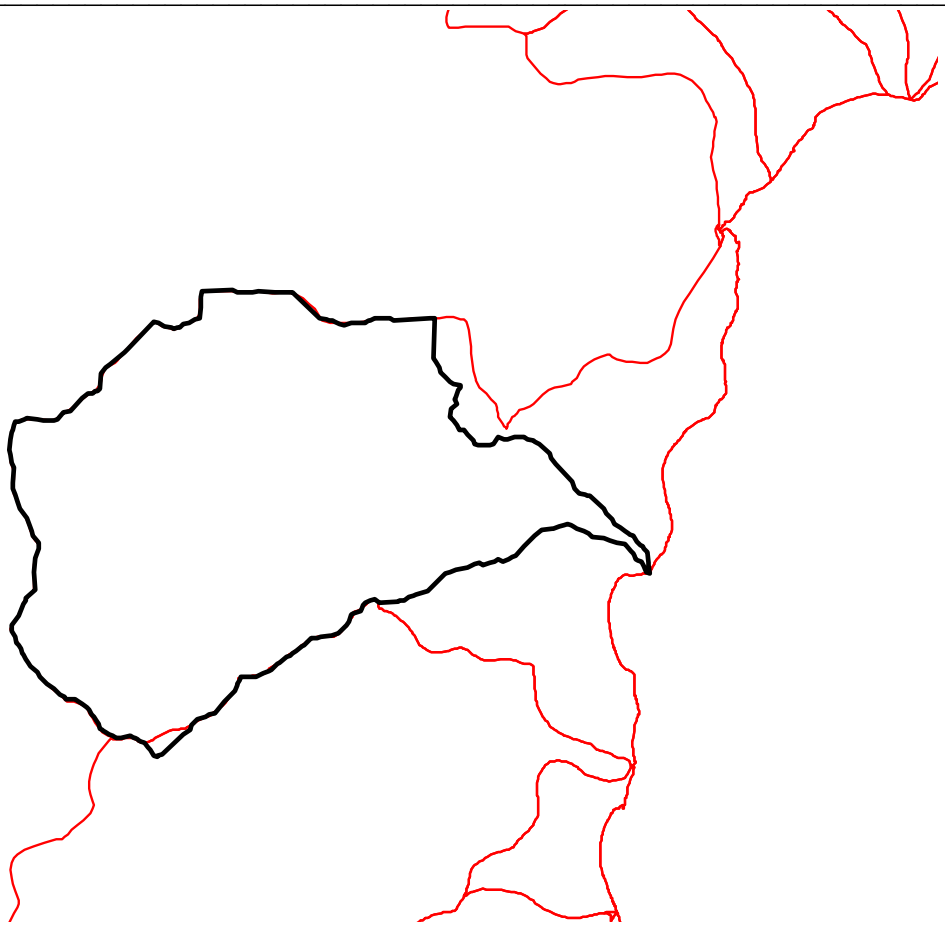

Figure 5-15. The Ward Creek generated watershed boundary (black line) and digitized boundary (red line).

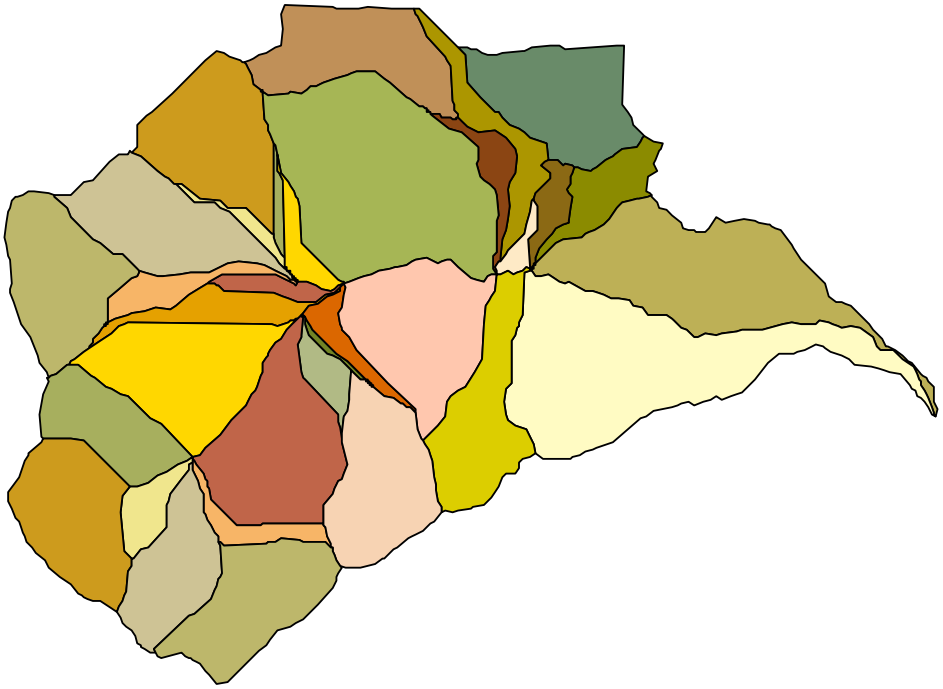

Figure 5-16. The first trial of the generation of AnnAGNPS cells for Ward Creek watershed.

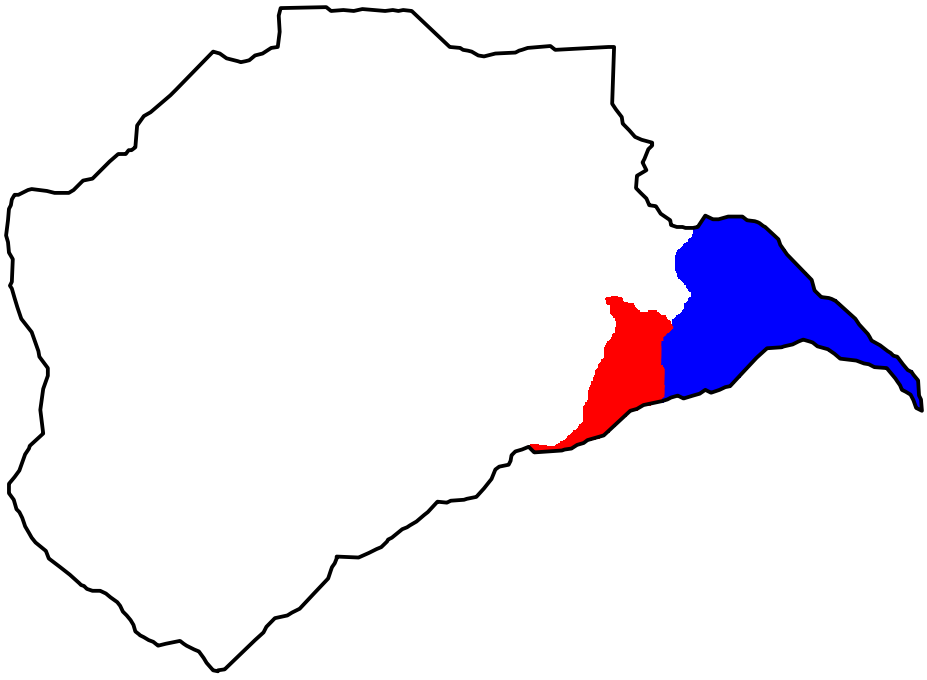

Figure 5-17. The delineation of TOPAGNPS regions for use with various CSA and MSCL values within TOPAGNPS to develop a more detailed subdivision of the Ward Creek watershed for use as AnnAGNPS cells. Region 1 is indicated with white, Region 2 with red, and Region 3 with blue.